

Engineering and Construction Department

E&C 24-10-11
INTERIM
QA PROCEDURE

REV. 0 02/21/85

ADVANCE RELEASEINTERFACE PROCEDURE FOR ENGINEERING SERVICES CONTRACTORS (ESC)
PREPARING DESIGN CHANGE PACKAGES, PROPOSED FACILITY CHANGE PACKAGES
OR OTHER STUDIES, ANALYSES, ETC., FOR SONGS 1, 2&3**A. GENERAL INFORMATION**

1. The purpose of this procedure is to establish and document the interface responsibilities between Southern California Edison Company (SCE) and Engineering Services Contractors (ESC) who will prepare or review Design Change Packages (DCP), Proposed Facility Change Packages (PFCP), studies, analyses or other engineering work for SCE.

a. An ESC designated as the Originating Contractor (OC) will prepare the work.

b. An ESC designated as the Review Contractor (RC) will independently review the work.

2. This procedure utilizes in part the existing E&C QA Procedures pertaining to the review of documents (E&C QA Procedure E&C 37-8-26) and PFC's (E&C QA Procedure E&C 24-10-15) and the E&C QA Procedures referenced therein.

3. SCE reviews and approves: (a) all ESC prepared DCP's, which consist of ESC and ESC Supplier drawings, drawing revisions and Interim Design Change Notices (IDCN's); and (b) all RC prepared PFCP's. Formal approval of the foregoing will occur when the SCE Project Engineer (PE) approves the PFCP, which includes the DCP.

NOTE: SCE approves other design documents, reports, studies, analyses, etc., as prescribed by the SCE PE when prepared by an ESC (OC) and reviewed by an ESC (RC).

4. This procedure shall apply to all design work regardless of safety class within and along the boundary (including the outside isolation zone) of the SONGS 1, 2&3 Plant Protected Area. It shall also apply to facilities outside the Protected Area as follows:

a. Facilities not excepted by the conditions of E&C 24-10-15, Exhibit 1, Criteria B5, which include:

- 1) Switchyard
- 2) Condensate Storage Tank and Transfer Piping System
- 3) Meteorological Instrumentation
- 4) Emergency Siren and Paging System
- 5) Radiation Monitoring Stations

6) Circulating Water Conduits and Structures

7) Onsite and Offsite PMF Facilities

5. Supplier documentation provided in support of material and services purchased by the ESC will be controlled by the ESC using ESC procedures which are consistent with E&C QA Procedure E&C 37-8-26.

6. Field changes necessary to construct a DCP will be processed by the SCE PE Site Representative in accordance with E&C QA Procedure E&C 24-10-17.

7. This procedure will be in effect for ninety days from date of Interim Publication, at which time it will be published as a Department Procedure or cancelled.

8. This procedure complies with the requirements of the applicable documents referenced in the Matrix of Regulatory Reference Materials for E&C QA Procedures.

B. PROCEDURAL ACTIONS**ACTION I - PREPARATION OF CONTRACTOR WORK ASSIGNMENTS (CWA's) OR PURCHASE ORDER (PO's)****SCE INITIATED CWA's****SCE INITIATING ORGANIZATION**

1. Prepare the CWA in accordance with E&C QA Procedure E&C 37-20-15 or prepare the PO in accordance with E&C QA Procedure E&C 37-26-16.

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	Responsible Division Manager	Date
Approved By:	<i>Jim Curran</i>	2/25/85
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CONTRACTOR INITIATED CWAs

CONTRACTOR (For Information Only)

2. Prepare the CWA in accordance with E&C 37-20-15 (ACTION II).

a. CWA or PO to OC - Define the design change and the purpose of the change. Provide all information available (refer to E&C QA Procedure E&C 24-10-16) that will assist the OC in performing the required task. Provide the DCP number.

1) Clearly identify that the DCP will be reviewed by the RC acting as an agent and independent reviewer for SCE and will prepare a PFCP for SCE. If the RC is known at the time of preparation of the CWA his identity shall be provided to the OC.

2) Material and services procured by the OC shall be controlled by OC procedures. The OC procedures shall include interfaces with SCE Procurement and Material Services. SCE's Manager of Nuclear Procurement, Responsible Engineer (RE) and the ESC's RC, shall be advised of all procurement activities.

b. CWA or P O to RC - Clearly identify that the RC is being retained as an agent and independent reviewer for SCE, to act and review in accordance with RC procedures which are consistent with E&C 37-8-26. A design change is prepared by the OC (identify OC), and upon RC approval of the design change, the RC will prepare a PFCP in accordance with RC procedures which are consistent with E&C 24-10-15. An approved copy of this CWA shall be forwarded to the OC as soon as the OC is identified.

ACTION II - PREPARATION OF DESIGN CHANGE PACKAGE

ORIGINATING CONTRACTOR (OC) (For Information Only)

1. Perform the design and prepare a DCP in accordance with instructions provided by SCE and in accordance with OC Procedures which are consistent with E&C 24-10-16 and E&C 24-10-17.

2. Upon completion of the preliminary DCP, issue for review and comment to all reviewers through an OC document control organization.

OC DOCUMENT CONTROL ORGANIZATION (For Information Only)

3. Indicate an Alpha revision number i.e., Rev. A on the first issue and issue for review and comment only.
4. Print this review and comment issue on green or blue tinted paper and CLEARLY identify each page with "NOT FOR CONSTRUCTION."
5. Distribution of the DCP Rev. A will be as follows: (Reference Exhibit I)
 - a. SCE PE - 3 copies for review and comment
 - b. SONGS I, 2&3 Supervisor, Configuration Control - 3 copies for review and comment
 - c. SONGS I, 2&3 Manager, Nuclear Training - 1 copy for information
 - d. SCE Construction Engineer - 1 copy for information
 - e. SCE Start-up Engineer - 1 copy for information
 - f. Constructing Contractor (CC) - 1 copy for information and preparation of the Construction Safety Assessment (CSA)
 - g. Bechtel Power Corporation - 1 copy for design interface review
 - h. RC - 3 copies for review and comment

NOTE: The OC will provide distribution internal to the OC for interdisciplinary review and comment and will consolidate and resolve internal review comments. These review comments and their resolution shall be made known to the RC.

SCE PROJECT ENGINEER (PE)

6. Receive Rev. A.
7. Distribute copies of the Rev. A DCP to the SCE Discipline Group Leader (GL), SCE Nuclear Project Development (NPD) and to SCE Quality Assurance (QA) for review.

ACTION III - INDEPENDENT REVIEW OF DESIGN CHANGE PACKAGE

SCE REVIEWERS

1. Receive and review the Rev. A. Document the review on and sign Form EO-165, Document Transmittal.

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2. If the DCP is unacceptable, prepare telephone notes or other appropriate documentation, describing the required corrections by the OC and attach to the signed EO-165.

3. Forward the original EO-165 with attachments to the RC for resolution of comments.

4. The SCE GL, SCE QA and SCE NPD will forward the EO-165's to the SCE PE for transmittal to the RC and to CDM, G.O. #3.

BECHTEL POWER CORPORATION
(For Information Only)

5. Perform interface review.
6. Notify the RC of design interferences.

REVIEWING CONTRACTOR (RC)
(Internal Review)
(For Information Only)

7. Receive the DCP, Alpha revision, and proceed as an independent reviewer of the DCP in accordance with RC procedures which are consistent with E&C 37-8-26 and E&C 24-10-15.

8. Perform Project Administrative and Drawing Control Actions stated in E&C 37-8-26 and E&C 24-10-15 for SCE up to the point of acceptance of the PFCP by the SCE RE.

NOTE: Formal approval of the design change occurs when the SCE PE approves the PFCP, which includes the DCP.

9. Concurrent with the Rev. A review, start PFCP preparation to identify Technical Specifications, Final Safety Analysis Report (FSAR), Fire Hazards Analysis (FHA), Emergency Plan (EP), etc., changes required. Immediately notify the SCE GL when such changes are required.

CONSTRUCTION CONTRACTOR (CC)
(For Information Only)

10. Review the DCP for constructability and construction interfaces.
11. Prepare Construction Safety Assessment (CSA).
12. Forward the comments and CSA to the RC.

REVIEWING CONTRACTOR (RC)
(Resolution/Consolidation of Comments)
(For Information Only)

13. Expedite, receive and consolidate comments from all reviewers both internal to the RC and from SCE and the CC. Retain all comments for inclusion in the backup package for submittal to SCE with the final PFCP.

NOTE: The RC is the central figure for review coordination. This means that the RC will expedite and collect comments from all reviewers except the OC.

14. Following resolution and consolidation of all reviewers comments, return the DCP with consolidated comments to the OC. Resolve all comments with the OC and proceed with ACTION IV.

15. Return consolidated comments to the OC for resolution.

**ACTION IV - APPROVAL OF THE DESIGN
CHANGE PACKAGE****ORIGINATING CONTRACTOR (OC)**
(For Information Only)

1. Receive and resolve comments.
2. Upon resolution of all comments satisfactory to the RC, the OC shall complete the DCP.
3. Submit the original and one white copy (marked "Information Only") of the completed DCP, now bearing a numerical revision number, i.e., Rev. 0, to the RC for concurrence of the design change.

REVIEWING CONTRACTOR (RC)
(For Information Only)

4. When satisfied that the DCP is correct and fully satisfies the SCE request to the OC, sign the original and the copy of the DCP, Rev. 0, (or other numerical revision) and retain the copy. Return the original to the OC.

NOTE: The SCE GL's/Designee's signature is required on the original and copy.

ORIGINATING CONTRACTOR (OC)
(For Information Only)

5. Upon receipt of the RC signed DCP (original):
 - a. Complete the OC DCP approval cycle, in accordance with OC procedures.
 - b. Forward five (5) white copies, marked "Information Only" to the RC through the issue procedure previously used for Rev. A for completion of the PFCP preparation.

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- c. Forward the original DCP with all OC and RC required approvals and all supporting documents (including reviewers comments) to SCE's PE. Attach as a cover to this transmittal, a Document Issue Request Form.

NOTE: All forms used by the OC should be similar to SCE forms but must bear the ESC logo or clearly indicate who prepared the documents.

SCE PROJECT ENGINEER (PE)

6. Receive the original DCP and all supporting documents.
7. Issue one copy of the DCP only to CDM.
8. Retain the original DCP for use in closing out the DCP task.

NOTE: CDM may request the original for film records.

CORPORATE DOCUMENTATION MANAGEMENT (CDM)

9. Process in accordance with CDM 26-8-19.

ACTION V - PREPARATION AND APPROVAL OF THE PFCP**REVIEWING CONTRACTOR (RC)
(For Information Only)**

1. Upon receipt of the formally issued copies of the DCP from the OC, complete the PFCP in accordance with RC procedures which are consistent with E&C 24-10-15. The name of the originator of the PFCP shall be the SCE GL.

- NOTES:
1. Preparation of the PFCP should commence on receipt of Rev. A.
 2. All forms used by the RC should be similar to SCE forms, but must bear the RC logo or clearly indicate who prepared the documents.

2. Upon completion of the PFCP submit the original PFCP and four copies of the PFCP to the SCE PE for approval processing.

NOTE: Final acceptance of the PFCP rests with SONGS 1, 2&3 Station. If the PFCP is rejected by SONGS 1, 2&3 Station, the PFCP will be returned, through SCE's PE and RE, to the RC for correction or revision and SCE will negotiate with the ESC RC on a case by case basis for revisions.

SCE PROJECT ENGINEER (PE)

3. Receive the original PFCP and four copies.
4. Obtain approval signatures from the SCE GL, Environmental Engineer, NPD and PE who will review the PFCP in accordance with E&C 24-10-15 to assure completion of necessary design activities and safety-environmental evaluation.

NOTE: SCE's NPD must be included as a reviewer of each PFCP.

5. Forward original and three copies of the PFCP to the Supervisor, Configuration Control, SONGS 1, 2&3.

**SUPERVISOR, CONFIGURATION
CONTROL, SONGS 1, 2&3
(For Information Only)**

6. Receive original PFCP and three copies.
7. Obtain necessary SONGS review and approval and required number of station approved copies of the PFCP for internal distribution.
8. Forward the station approved PFCP to CDM Site.

**CORPORATE DOCUMENTATION
MANAGEMENT (CDM) SITE
(For Information Only)**

9. Receive SONGS station approved PFCP, process in accordance with CDM 26-8-19 for release to construction.

**ACTION VI - PREPARATION OF STUDIES,
ANALYSES OR OTHER
ENGINEERING WORK****ORIGINATING CONTRACTOR (OC)
(For Information Only)**

1. On receipt of an SCE approved scope of work, perform the study, analysis or other engineering work, hereinafter referred to as Work, in accordance with OC procedures that are consistent with E&C QA Procedures E&C 24-7-13, E&C 24-7-15, or E&C 37-8-26, as applicable.
2. Upon completion, the Work shall be issued for review and comment as an Alpha revision, i.e., Rev. A.

**OC DOCUMENT CONTROL ORGANIZATION
(For Information Only)**

3. Upon completion indicate an Alpha revision number on the Work, i.e., Rev. A and issue for review and comment only.

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4. Provide and distribute copies in accordance with Exhibit 2 of this procedure.

NOTE: The OC will provide distribution internal to the OC for review and will consolidate and resolve internal review comments. These review comments shall be made known to the RC.

ACTION VII - REVIEW OF STUDIES, ANALYSES OR OTHER ENGINEERING WORK

SCE PROJECT ENGINEER (PE)

1. Receive the work, Rev. A.
2. Distribute copies of the Work, Rev. A to the SCE GL or as designated by the SCE PE for review and comment.

SCE DISCIPLINE GROUP LEADER (GL)/SCE REVIEWERS

3. Receive and review the Work as directed by the SCE PE and in accordance with the Design Review Responsibility Matrix (DRRM).
4. Document the review on Form EO-165 and sign the EO-165.
5. If the Work is unacceptable, prepare telephone notes or other appropriate documentation describing the required corrections by the OC and attach to the signed EO-165.
6. Forward the original EO-165, with attachments to the SCE GL.

SCE DISCIPLINE GROUP LEADER (GL)

7. Receive and review all original EO-165's, with attachments. On concurrence with the reviewers comments forward all EO-165's with attachments to the SCE PE.

NOTE: Resolution of comments rests with the RC.

SCE PROJECT ENGINEER (PE)

8. Receive reviewer's EO-165's with attachments.
9. Provide one copy of each reviewer's EO-165, with attachments to the RC.
10. Forward original EO-165's, with attachments to CDM.

CORPORATE DOCUMENTATION MANAGEMENT (CDM) (For Information Only)

11. Receive original EO-165's, with attachments.

12. Forward one copy of each EO-165, with attachments, to the ESC RC Document Control Organization and retain the originals. Process in accordance with CDM 26-8-19.

REVIEWING CONTRACTOR (RC) (For Information Only)

13. Receive the Work, Rev. A, EO-165's and attachments from the SCE PE and proceed as an independent reviewer of the Work in accordance with RC procedures which are consistent with E&C 24-7-13, E&C 24-7-15, or E&C 37-8-26, as applicable.

14. Receive and resolve comments from all reviewers except the OC.

15. Following resolution and consolidation of SCE and RC comments, return the Work, Rev. A to the OC and resolve all comments with the OC.

ACTION VIII - APPROVAL OF STUDIES, ANALYSES OR OTHER ENGINEERING WORK

ORIGINATING CONTRACTOR (OC) (For Information Only)

1. Upon resolution of all comments satisfactory to the RC, complete the Work.
2. Submit the original and one copy of the Work, now bearing a numerical revision number, i.e., Rev. 0, to the RC for concurrence of the Work.

REVIEWING CONTRACTOR (RC) (For Information Only)

3. When satisfied that the Work is correct and fully satisfies the SCE request to the OC, sign the original and the copy of the Work, Rev. 0, (or other numerical revision) and retain the copy. Return the original to the OC.

NOTE: The SCE GL's/Designee's signature is required on the original and copy.

ORIGINATING CONTRACTOR (OC) (For Information Only)

4. On receipt of the RC signed Work (original) complete the OC Work approval cycle in accordance with OC procedures.

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5. Forward the original of the Work with all OC and RC required approvals and all supporting documents, including all reviewers comments to SCE's PE. Attached as a cover to this transmittal shall be a Document Issue Request Form.

NOTE: All forms used by the RC should be similar to SCE forms but must bear the RC logo or clearly indicate who prepared the documents.

SCE PROJECT ENGINEER (PE)

6. Receive the Work, Rev. 0 from the OC and obtain approval signatures.

7. When approvals have been obtained prepare an EO-165 for transmittal of the original work to CDM (G.O. #3).

8. Forward the EO-165 and the Work, Rev. 0 to the SCE GL for signature.

SCE DISCIPLINE GROUP LEADER (GL)

9. Receive the Work and the SCE PE prepared EO-165.

10. Prepare a letter or report to the Project Manager from the SCE PE, stating the results of the Work performed. Copies shall be distributed as directed by the SCE PE.

11. Sign the EO-165 attached to the Work and return to the SCE PE.

SCE PROJECT ENGINEER (PE)

12. Receive the Work with the SCE GL signed EO-165 and forward the Work, with all attachments to CDM.

CORPORATE DOCUMENTATION MANAGEMENT (CDM)

(For Information Only)

13. Receive the Work with all attachments, process and file in accordance with CDM procedures.

C. REFERENCES

1. CDS QA Procedure CDM 26-8-6, Routing of Supplier Data for review, comment and approval, SONGS 1, 2&3

2. CDS QA Procedure, CDM 26-8-19, Routing of Engineer-Constructor and E-C Supplier Drawings, Drawing Revisions, Documents, Drawing Change Notices and Design Change Packages for review, comment, approval and release, SONGS 1,2, 3

3. E&C QA Procedure E&C 24-7-13, Design Criteria Documents for Engineering Construction Project (ECP) Activities for SONGS Units 1, 2&3

4. E&C QA Procedure E&C 24-7-15, Performing Design Analysis and Verification for SONGS 1, 2&3

5. E&C QA Procedure E&C 24-10-15, Processing of Proposed Facility Change Packages for SONGS 1, 2&3

6. E&C QA Procedure E&C 24-10-16, Development, Review, Approval and Release of SCE Design Change Packages (DCP) SONGS 1, 2&3

7. E&C QA Procedure E&C 24-10-17, Development, Review, Approval and release of SCE Interim Design Change Notices (IDCN) SONGS 1, 2&3

8. E&C QA Procedure E&C 37-8-26, Review and Approval of Contractor, E-C and Supplier Documents for Material, Equipment and Services Purchased by SCE for SONGS 1, 2&3

9. E&C QA Procedure E&C 37-20-15, Processing Contractor Work Assignments for SONGS 1, 2&3

10. E&C QA Procedure, E&C 37-26-16, Procurement of Items and Services for SONGS 1, 2&3 Engineering and Construction Projects (ECP)

11. Design Review Responsibility Matrix (DRRM)

12. FORM EO-165, Document Transmittal

13. Emergency Plan (EP)

14. Final Safety Analysis Report (FSAR)

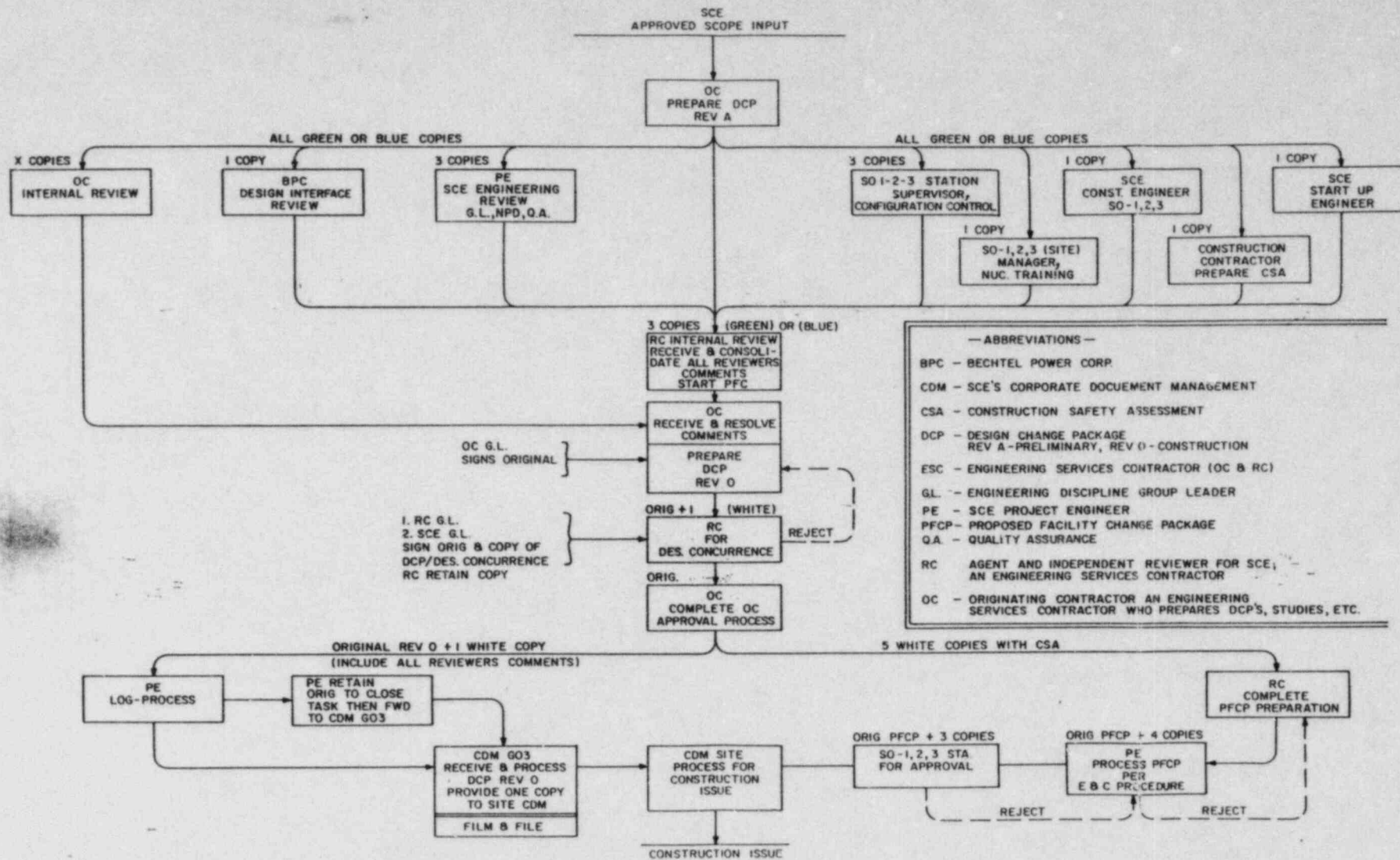
15. Fire Hazards Analysis (FHA)

16. Technical Specifications

D. DEFINITIONS

1. Refer to the E&C QA Reference Procedures Manual Glossary.

EXHIBIT I
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EXHIBIT II

